

House Bill 1785 directed state agencies to incorporate the environmental benefits in their operation of their grant and loan programs. Rather than focusing solely on grant and loan programs, the Department of Fish and Wildlife (WDFW) was directed to incorporate the environmental benefits into its project prioritization and selection process in administering programs related to the protection or recovery of fish stock which are funded in the capital budget.

WDFW administers two grant programs related to salmon<sup>6</sup> recovery while the remaining are capital budget programs carried out by the agency itself

# **Fish Screens Program**

The goal of this program is to protect fish at water diversion facilities and improve fish access to productive habitat by working with owners of water diversions who voluntarily wish to comply with screening and passage laws.

Fish-access problems must be corrected in order to accomplish state and federal salmon recovery initiatives. Inventories of passage and screening problems are promoted and follow-up correction is accomplished through fabrication and installation of screens and bypasses at surface water diversions and construction of fish passage structures at associated impassable structures. Technical assistance is also provided to the owners who are pursuing correction.

#### **General Statutory Provisions**

Screening water diversions to protect fish is mandated by RCW 77.55.040. Maintenance of fish passage is mandated by RCW 77.55.060. Upgrading of previously constructed fish passage and screening facilities is addressed by RCW 77.55.070.

# **Identification of Eligible Projects**

Projects are first inventoried and prioritized by outside parties or WDFW crews using the Priority Index (PI) methodology contained in the WDFW Habitat Program's *Fish Passage Barrier and Surface Water Diversion Screening Assessment and Prioritization Manual* or other substitute methodology. The PI is a numeric indicator that reflects a project's relative priority based upon the potential production benefits to both anadromous and resident salmons, with adjustments for closely related species interactions, expected passage improvement, stock health, and project cost.

<sup>&</sup>lt;sup>6</sup> Salmon" in this context refers to all species of salmon, steelhead, trout and char native to Washington

Once a project is inventoried and prioritized, project options are developed. These options are evaluated based upon their ability to benefit particular species, their cost and feasibility, permitting requirements, compatibility with natural channel or estuary forming processes, and the potential to develop partnerships with tribes, local governments or federal agencies.

In order to receive federal funding project proponents must complete an application form developed jointly by WDFW and the U.S. Fish and Wildlife Service. In addition to meeting minimum qualifying criteria the proposed project is ranked based upon specific criteria.

# **Funds Appropriation History**

Appropriations for the past two and current biennia are shown in the table below.

# **Fish Screens Appropriation History**

Biennium	State Bonds	Federal Funds	Local Funds
1997-99	\$0	\$0	\$0
1999-01	\$0	\$0	\$0
2001-03	\$1,500,000	\$3,500,000	\$5,000,000

Specific appropriations for this program began in the 2001-03 biennium.

Additional information on fish screen correction is contained on WDFW's web site at: http://www.wa.gov/wdfw/hab/engineer/habeng.htm#upstrm

## **Program Implementation of HB 1785**

#### **Consultation with Interest Groups**

Proposed project lists are shared with the department's Watershed Stewardship Teams and members of the WDFW Enforcement Program associated with the Voluntary Compliance Program, who provide liaison between WDFW and local stakeholders. The project lists are meant to facilitate a watershed approach to habitat construction projects.

## **Consultation with other Natural Resource Agencies**

The Priority Index methodology referenced above is being utilized in concert with the SRFB process administered by IAC and with all state and federal agencies involved in the Boldt Phase 2 culvert case.

#### **Outcome-Focused Performance Measures**

The ideal performance measure for habitat-related construction projects is the number of adult equivalent salmon produced on an annual basis as a result of a project. This or some surrogate is an acknowledged way to prospectively evaluate projects. The Priority Index methodology referenced above captures this concept.

However, measurement of the salmon produced is extremely difficult and the specific cause and effect relationship of the project is nearly impossible to document. The next best performance measure available is miles opened by a passage project - a statistic that is a good surrogate for salmonids produced and also one that can be used to plan projects. It can also be measured after the project is completed. Derivation of this statistic requires interaction with the Salmon and Steelhead Habitat Inventory and Assessment Program (SSHIAP), and its map measurement capabilities. The number of diversions screened is the most readily accessible performance measure for this project type. For the inventory effort, the performance measure is the number of watersheds inventoried.

Because the Priority Inventory process was in place prior to passage of HB 1785 the Department did not modify its prioritization and selection process because the existing approach largely captures the goals of the bill.

#### **Recommendations for a Monitoring Program**

The Department of Fish and Wildlife currently maintains a fish passage barrier database. Fish passage projects are currently monitored for the first year after construction for compliance with the Hydraulic Permit Approval (HPA) and fish passage and screening criteria. The fish passage barrier database is also a data layer in the Department's Salmon and Steelhead Inventory and Assessment Project (SSHIAP) that contains data on fish abundance and habitat conditions. A larger monitoring question is tracking the number of barriers removed by various groups/government entities. By upgrading the HPA database, the state could track improved access to the barriers removed and corresponding miles of habitat made available to salmon.

Implementation (short term compliance) monitoring is a confirmation that a project is built to legal (passage and screening) standards. Ideally, this would involve inspection and as-built confirmation by the permitting agency (i.e. the HPA issued by WDFW). However, because of insufficient funds to allow inspection of every completed project, the best surrogate is the issuance of the HPA, with the assumption that the provisions will be followed to the best of the permit recipient's ability. This also affords a cross-reference to databases that record uncorrected passage and screening problems. The issuance of the HPA (and ideally follow-up inspection) would then provide the trigger to change the status of the problem to "corrected" in those databases. In addition, the HPA is the common denominator for all passage and screening projects because it is universally needed for in-water work, so it will always provide a linkage regardless of who is doing the work or who is funding/tracking the project (e.g. SRFB).

The department does not anticipate making any changes at this time to its monitoring program as it relates to fish screens to meet the intent of HB 1785.

Long-term effectiveness and validity monitoring are being addressed and defined by the Technical Steering Committee in the Boldt Phase 2 culvert case, which will require coordination with SB 5637 Salmon Recovery Monitoring.

The Boldt Phase 2 culvert court case was brought by the treaty tribes to prompt the State to accelerate correction of passage problems at state-owned facilities. This effort covers the full range of the correction cycle: inventory, prioritization, scoping, design, construction (correction), monitoring, database tracking, and coordination, and includes all parties to the case that own or are responsible for problem structures. The parties to the case have agreed to a 6-month stay in formal legal proceeding to pursue a negotiated settlement. While this stay is in place two parallel processes are occurring: legal/policy and technical. The technical portion is embodied in the Technical Steering Committee (TSC) that is facilitated by a representative of the State Attorney Generals Office. The TSC includes representatives from WDFW, DNR, Parks, and WSDOT, USFS, USFWS, US Navy, the Department of Defense, NMFS, COE, NPS, BIA and BPA and tribal entities (NWIFC and individual tribes). Each of the components of the project cycle is being debated and, hopefully, agreed upon before a settlement can be contemplated. Without settlement, the federal district court will resolve the issue. Any settlement will likely require review and approval by the Legislature.

#### **Barriers to Fully Implementing HB 1785**

The main barrier to recording performance measures is establishing the linkages between barrier/unscreened diversion databases and corrections expressed through the HPA database and SSHIAP. The Technical Steering Committee in the Boldt Phase 2 Culvert Case is discussing this.

# **Salmon Recovery Planning Grants**

The goal of the Salmon Recovery Planning Grant Program is to assist local watershed groups coordinate and develop regional salmon recovery plans. The program's highest priority is to help establish and build planning capacity at the regional scale and to develop linkages between regional organizations, lead entities, and watershed planning units to ensure successful development of regional salmon recovery planning.

A salmon recovery plan, for the purposes of the program, is a document that defines the actions necessary to recover one or more salmonid populations within a specified region. A salmon recovery plan:

- # Includes numeric goals that describe a recovered population that can be used to measure success.
- # Describes actions related to habitat and hydropower that are necessary to recover fish populations and meets the requirements of the Clean Water Act (CWA), Growth Management Act (GMA), and Shorelines Management Act (SMA).
- ## Combines habitat actions with the actions and implementation steps for hatchery and harvest management developed primarily by WDFW, tribes, National Marine Fisheries Service (NMFS) and the US Fish and Wildlife Service (USFWS).
- # Details the commitments to implementing, monitoring and evaluating those actions.

The grantee will have responsibility for coordinating the development of the plan; it will not have authority, or responsibility for implementation of all plan elements. This means that grantees will perform the necessary coordination, facilitation and organization, as well as have overall responsibility for ensuring that milestones for completing the plan are met.

# **General Statutory Provisions**

The 2001 Legislature allocated \$1 million in the operating budget to the Washington Department of Fish and Wildlife (WDFW) for salmon recovery planning at the local or regional scale. The 2002 Legislature moved these funds from the operating budget to WDFW's capital budget. These two appropriations are the only legislative guidance for this program. Both of these enactments are shown below.

#### 2001 ESSB 6153- Operating Budget (Sec 307 (8))

"\$1,000,000 of the water quality—state appropriation is provided solely to fund grants to lead entities established under chapter 77.85 RCW or watershed planning units established under chapter 90.82 RCW that agree to coordinate the development of comprehensive local and regional salmon recovery plans. The department shall establish a model for local and regional plans as well as eligibility and evaluation

criteria for distribution of funds to lead entities and watershed planning units. No annual grant shall exceed \$125,000 per year."

# 2002 SB 6396 - Capital Budget (Sec 133)

"The water quality account appropriation is provided solely to fund grants to lead entities established under Chapter 77.85 RCW or watershed planning units established under chapter 90.82 RCW that agree to coordinate the development of comprehensive local and regional salmon recovery plans."

# **Eligible Recipients and Activities**

Eligible applicants are lead entities established under chapter 77.85 RCW or watershed planning units established under chapter 90.82 RCW. While no awards have been made as of May 2002 with the funds under the capital appropriation, WDFW made the following preliminary commitments in February 2002 under the operating budget:

- # Hood Canal Coordinating Council (a 2496 Lead Entity): \$20,000;
- # Elwha Morse/Dungeness River Management Teams (a 2514 watershed planning unit): \$20,000;
- # Yakima River Salmon Recovery Board (a 2496 Lead Entity): Approx. \$80,000-125.000.

# **Funds Appropriation History**

Appropriations for the past two and current biennia are shown in the table below.

# Salmon Recovery Planning Grants Appropriations History

Biennium	Amount
1997-99	\$0
1991-01	\$0
2001-03	\$1,000,000

No funds have been appropriated for this program prior to the current biennium. This appropriation is currently financed through state bonds issued through the State Building Construction Account.

These state funds administered by WDFW are being coordinated with \$2 million of federal funds appropriated through the Salmon Recovery Funding Board for the development of salmon recovery plans by regional recovery boards. The SRFB allocation decisions were based on WDFW recommendations and the salmon recovery planning contract deliverables developed by WDFW.

The Washington Department of Fish and Wildlife's Salmon Recovery Planning Grant Program Policy and Procedures Manual. November 5, 2001 contains more details on the grant program.

# **Program Implementation of HB 1785**

#### **Consultation with Grant Recipients**

In administering the Salmon Recovery Planning Grant Program, WDFW circulated a draft schedule of deliverables to all grant recipients. A meeting was held in April 2002 for all grant recipients to review and discuss the deliverables. Additionally, a comment period on the deliverables was held. Following the comment period, individual contracts were prepared with the deliverables included, and one-on-one negotiations took place with each recipient.

Applications for this grant program were made available in November 2001, and were due to the department in December 2001. A multi-agency review panel evaluated the applications individually and collectively and made recommendations to the department based on the applicant's answers to the evaluation questions.

These evaluation questions centered around 1) Geographic Scale (25 pts), 2) Organizational Structure and Mission (25 pts), 3) Integration of Interests (25 pts), and 4) Use of Funding (10 pts). Results of this scoring process and application information served as the basis for allocation of funds. (For more details on eligibility evaluation criteria, see "The Washington Department of Fish and Wildlife's Salmon Recovery Planning Grant Application Materials November 5, 2001").

In May 2002, WDFW solicited a request to all lead entities and planning units for input on the best way to distribute the remaining funds. The remaining funds will be distributed by working with the appropriate state and regional entities to strategically apply the funds where they would best be utilized. It is anticipated that these remaining uncommitted funds will be awarded by mid to late summer 2002. Criteria used to distribute these funds will focus around lead entity's and/or watershed planning unit's willingness, readiness, and capacity to integrate and contribute to regional recovery planning efforts.

To date, the program has not discussed with grant applicants the requirements of HB 1785 or the need to incorporate performance measures into grant applications.

Process utilized to consult/coordinate with other natural resource agencies related to performance measures and HB 1785

Once the department approved grant applications, an iterative process occurred to seek input from those affected. Draft contract deliverables have been discussed at several meetings with award recipients as well as with IAC, Ecology, GSRO, and WDFW staff.

Draft contract deliverables have also been reviewed at Natural Resource Joint Cabinet Assistance Group meetings. Program staff also participated in discussions with IAC as it devised it HB 1785 response for salmon recovery projects.

Within funding for this program, the Washington Legislature directed the WDFW to establish a model for local and regional salmon recovery plans. WDFW has developed this recovery plan model in collaboration with tribes, state agencies, National Marine Fisheries Service (NMFS), U.S. Fish and Wildlife Service (USFWS), the Northwest Power Planning Council (NWPPC), and local and regional salmon recovery planning efforts. The model incorporates the essential elements of a salmon recovery plan, acknowledges the differences in process and goals for a wide array of planning activities, and outlines the ways to economize by achieving multiple planning goals with one planning activity.

In development of this model, a number of existing guidance documents and plans were reviewed, including those from the Puget Sound Shared Strategy, Lower Columbia Fish Recovery Board, NWPPC's Technical Guide for Sub basin Planners, Hood Canal and Juan de Fuca Summer Chum Salmon Conservation Initiative, existing NMFS Recovery Plans, and the Department of Ecology's Guide to Watershed Planning. The general and essential elements of a recovery plan are generally well known, but providing a template for those elements will generate a consistency in process and product that ensures the successful implementation of plans and achievement of their goals statewide.

The objective of this model is to specify the requirements for content and substance that will be expected in comprehensive salmon recovery plans that are developed using Salmon Recovery Planning Grant Program funds.

An auxiliary objective is to describe contents for recovery plans intended to meet requirements of the federal Endangered Species Act. For example, it is the intent of the United States Fish and Wildlife Service that plans developed under these criteria will serve as recovery implementation action plans in support of the final, range-wide bull trout recovery plan. The NMFS has indicated a similar intent that plans developed using this guidance will be adopted as, or appended to, federal salmon and steelhead recovery plans.

#### **Outcome-Focused Performance Measures**

WDFW will use contract deliverables for the grant program as "outcome-based" performance measures in that they are intermediate checks or steps toward reaching a final Salmon Recovery Plan for each ESU. These deliverables are developed to demonstrate progress of the grant recipient towards completion of a regional salmon recovery plan. These deliverables will be unique for each grant recipient, but will be consistent with program objectives. With these time-based deliverable contracts, WDFW will ensure that performance by the recipients meets WDFW and state expectations.

Grant recipients will submit quarterly reports demonstrating progress in developing a recovery plan based on the WDFW's salmon model recovery plan. Grantees will identify activities, products and expenditures for each of the following elements:

- # Factors contributing to decline or limiting recovery section;
- ∉# Recovery goals;
- ∉# Actions to achieve goals;
- ∉# Implementation and commitments;
- ∉# Research plan;
- # Monitoring and adaptive management (coordinate with SB 5637);
- # Implementation funding needs estimate;
- # Outreach/Public involvement plan.

These measurements are used by program managers to evaluate progress towards completion of regional salmon recovery plans and to validate cost estimates, as well as to determine if success of the program can be achieved with minimal administrative staff support.

Implementation of the individual salmon-recovery plans will be measured as part of an evaluation and adaptive management plan identified in the recovery plan itself. Performance of salmon recovery will be measured in terms of fish abundance and productivity, population status, diversity and spatial distribution. There are a number of existing programs, such as WDFW's core-fish monitoring activities, which will be used to measure the status of fish populations.

Because this grant program was well under way prior to the passage of HB 1785, performance measures were already developed. The Salmon Recovery Planning Grant Program also funds a planning process that identifies actions to achieve environmental benefits, rather than the actual implementation of these actions for environmental benefits. As a result no modifications were made to performance measures used in the grant program.

#### **Agency Recommendations for a Monitoring Program**

Program monitoring will consist of tracking and reviewing deliverables identified in contracts. The department's Salmon Recovery Planning staff will perform monitoring of the grant recipients actions and activities. Through the submission of quarterly reports, the department will be able to measure their incremental progress towards a recovery plan.

The department will monitor the outcomes of the grant program through the development of final recovery plans. Currently each contract is written through the end of the biennium. Assuming additional funds become available to complete the plans next biennium, this program will continue to monitor for the duration of each plan development and implementation.

# **Barriers to Fully Implementing HB 1785**

There are several barriers to fully implementing HB 1785 into this program. Because the program came under HB 1785 only in April 2002 with the transfer of funds into the capital budget, program staff has had little time to assess effects of the HB 1785 performance measurement emphasis. In addition, the limited amount of funds in this program is not adequate to allow staff to significantly address the requirements of the legislation.

# Forest and Fish Road Upgrades

The Forest and Fish Road Upgrade effort is designed to bring forest roads on Washington Department of Fish and Wildlife (WDFW) lands up to new standards required by the Forest Practices Act (RCW 76.09). The new rules are designed to identify and resolve fish passage and sedimentation problems on forest lands. WDFW owns 500,000 acres of land of which approximately 104,000 acres are in forest habitats. The department is required to complete a road inventory, assessment, and detailed Road Maintenance and Abandonment Plans (RMAP) for 500 miles of forest roads on WDFW lands by the end of 2005. Plans will identify corrective actions necessary to bring WDFW's forest roads into compliance with new standards by the end of 2015.

#### **General Statutory Provisions**

The Forest and Fish Road upgrade effort is guided by the Forest Practices Act (RCW 76.09) and the new requirements enacted by the Legislature with HB 2091 (1999). These requirements are implemented through state Forest Practice rules (WAC 222). In May 2001, the Forest Practices Board adopted permanent rules, which are designed to provide protection for aquatic resources and to ensure compliance with the Endangered Species Act and the Clean Water Act while providing for the economic viability of the forest industry. These rules set a timetable for completing road and abandonment plans.

WAC 222-24-052 Road Maintenance requires that "To the extent necessary, forest roads must be maintained to prevent potential or actual damage to a public resource." This requires WDFW to identify, inventory, assess and prioritize corrective action needed on forest roads on a "worst first" principal as part of the planning process. Guidelines on how to meet the standards are located in the Forest Practices Board manual. The primary focus of the manual is the enactment of Best Management Practices to protect water quality, aquatic, wildlife and riparian resources and to help prevent potential or actual road related resource damage.

#### Identification of Eligible Projects

Unlike many of the programs included in HB 1785, the Forest and Fish Road upgrade program is not a grant program but rather an agency specific initiative to meet the requirements of the state Forest Practices Act, ESA and CWA.

The program includes:

- # Completion of detailed field inventory, assessment and identification of the 500 miles of WDFW forest roads;
- # Development of detailed RMAPs for all WDFW forest roads;
- # Identification and prioritization of corrective actions to upgrade forest roads to new standards:
- # Performance of corrective actions to meet new standards by 2015; and

# Development of annual reports outlining road maintenance and corrective actions performed on WDFW forest roads.

# **Funds Appropriation History**

Appropriations for the past two and current biennia are shown in the table below.

# **Forest and Fish Road Upgrades**

Biennium	State Bonds
1997-99	\$0
1999-01	\$0
2001-03	\$500,000

No other funds have previously been appropriated to WDFW for this program.

Additional information on the Forest Practices Act and rules can be found at the Department of Natural Resources (DNR) web site at http://www.wa.gov/dnr/htdocs/fp/div/div.html

# **Program Implementation of HB 1785**

#### **Consultation with Affected Interest Groups**

Public input from past wildlife area planning efforts will be incorporated into RMAPs. Each wildlife area will reestablish a Citizens Advisory Group (CAG) to address public input in land management plans. CAGs will be used to incorporate public input into RMAPs while addressing state statutory requirements for WDFW to correct sedimentation and fish passage problems.

Performance measures for this program have been developed based on compliance with the new forest practice rules. The department has not consulted interest groups in the development of performance measures.

## **Consultation with Other Agencies**

All RMAPs completed by the program will be submitted and reviewed by DNR, WDFW, Department of Ecology, local Tribes and other interested parties before they are approved.

DNR, WDFW, Ecology and local tribes will work together to approve RMAPs that will move towards implementation of the forest road maintenance regulations. Together, these entities have identified the percent of roads inventoried (20% for each year from

2001-2005) and the percent of roads upgraded (100% by 2015) as critical measures towards compliance.

# **Outcome-Focused Performance Measures**

There are two performance measures being monitored to assess progress: 1) the percentage of forest roads inventoried in a RMAP, and 2) the percentage of forest roads upgraded to bring WDFW roads into compliance with WAC 222.24.051 and 052. WDFW has 500 miles of forest roads of which 20 percent or 100 miles are currently being inventoried and for which RMAPs will be submitted this year. An additional 20 percent will be inventoried by December 31, 2002. Additional 20 percent increments will be inventoried and plans submitted in years 2003, 2004, and 2005. This will meet the requirements of the law to have all WDFW forest roads inventoried and in a RMAP by 2005 (WAC 222.24.051).

In determining which roads to inventory first, the department evaluates the following five parameters within each management block: 1) the presence of threatened and endangered fish, 2) presence of water bodies where there are known fine sediment, turbidity or temperature issues (based on the 303(d) water quality list), 3) soil types where there is a high potential for slope failure, 4) coincidence of other RMAP efforts that may create efficiencies, and 5) likelihood of high future-forest practice usage.

The percent of roads upgraded to new road maintenance standards is being used as a surrogate measure for improvements in water quality and sedimentation. Funding has not been provided to accomplish monitoring of water quality, sedimentation and temperature. Monitoring each project's impact on associated water quality and habitat improvement would be very expensive and not as meaningful as focusing efforts on overall improvements in watershed performance and productivity.

Corrective actions will be prioritized to ensure that the worst conditions are addressed first. Factors used in prioritization include evaluating sedimentation vulnerability based on soils, slopes, precipitation, etc. Fish-passage correction projects are prioritized based on the area of habitat made available to fish. SSHEAR prioritization protocols will be used for fish passage projects.

To determine the percentage of forest roads inventoried and the percentage of forest roads upgraded, the department will track the following specific items:

- # Miles of forest roads inventoried.
- # Miles of road where corrective actions are needed and where they are accomplished;
- # And the number of fish passage problems identified and corrected.

#### **Monitoring Performance Measures**

Performance measures will be tracked in a GIS database and used to measure and report where potential problems exist and have been addressed. Once roads are inventoried and/or upgraded they are entered into the RMAP GIS. This database also records and

maps existing sedimentation and fish passage problems. A GIS model predicts where additional sedimentation issues may exist. As RMAPs identifying and prioritizing problems are completed, available funds will be used to correct problems. The RMAP GIS database will also be used to show where corrective actions have occurred.

Information in the RMAP GIS will also be reported to DNR to comply with the new rules. The information will also be shared within WDFW and with the public where it can be used to assess and monitor watershed health. Performance measures will also be reported to the director of Fish and Wildlife quarterly to monitor progress on meeting performance targets.

# **Barriers to Fully Implementing HB 1785**

Other than funding, no barriers have been identified to implementing the requirements of HB 1785. The Legislature provided funding for the current biennium to begin implementation of the road inventory and initial corrective actions. Funding for future biennia is not guaranteed.

In addition, funding is not currently available to conduct monitoring to determine the impact of each project on associated water quality and habitat improvements. Implementing this type monitoring would be very expensive.

# **Endangered Species Act Compliance on Agency Lands**

Like other landowners, the Department of Fish and Wildlife must operate its lands in a manner that does not harm fish and wildlife species listed under the federal Endangered Species Act (ESA). As a result the Department has created a program to ensure ESA compliance on agency lands. This program focuses on the protection of fish at water diversion facilities and improvement of fish access to productive habitat on WDFW lands. Fish-passage barriers and inadequate screening conditions at diversions and lake outlets exist statewide over the approximately 790,000 acres of WDFW owned and managed lands and on 625 WDFW access sites.

Correction of these problems also helps accomplish salmon recovery efforts and comply with state fish passage and screening laws and meet the requirements of the new Forest Practice rules. Problem facilities include culverts, dams, fishways, lake outlets, and water diversions. Correction is accomplished through fabrication and installation of screens and bypasses at surface water diversions and construction of fish passage structures at impassable structures. This \$54 million, ten-year phased project is a long-term, on-going process designed to ensure compatibility of state actions with those of other owners and ESA.

# **General Statutory Provisions**

Screening water diversions to protect fish is mandated by RCW 77.55.040. Maintenance of fish passage is mandated by RCW 77.55.060. Upgrading of previously constructed fish passage and screening facilities is addressed by RCW 77.55.070. The federal Endangered Species Act is found in 16 USC, Chapter 35.

### **Eligible Projects**

The projects selected are first inventoried and prioritized by WDFW crews using the Priority Index (PI) methodology contained in WDFW Habitat Program's *Fish Passage Barrier and Surface Water Diversion Screening Assessment and Prioritization Manual* or other substitute methodology. The PI is a numeric indicator that reflects a project's relative priority based upon the potential production benefits to both anadromous and resident salmonids, with adjustments for closely related species interactions, expected passage improvement, stock health, and project cost.

Once a project is inventoried and prioritized, project options are developed. These options are evaluated based upon their ability to benefit particular species, their cost and feasibility, permitting requirements, compatibility with natural channel or estuary forming processes, and the potential to develop partnerships with tribes, local governments or federal agencies.

Other project activities include fabrication (e.g. portable fish screen or baffled culvert), staging at the construction site, construction, revegetation of the site, and short-term "tune-up" which generally occurs after compliance monitoring and the first winter of high water flows

#### **Funds Appropriation History**

Appropriations for the past two and current biennia are shown in the table below.

**ESA Compliance on Agency Lands Appropriation History** 

Biennium	State Bonds	Federal
1997-99	\$750,000	\$0
1999-01	\$0	\$0
2001-03	\$900,000	\$4,200,000

Additional information on Fish Screen correction is contained on WDFW's web site at: http://www.wa.gov/wdfw/hab/engineer/habeng.htm#upstrm

# **Program Implementation of HB 1785**

# **Consultation with Affected Interest Groups**

Proposed project lists are shared with the department's Watershed Stewardship Teams, which provides liaison between WDFW and local stakeholders. The project lists are meant to facilitate a watershed approach to habitat construction projects.

#### **Consultation with Other Natural Resource Agencies**

The Priority Index methodology referenced above is being utilized in concert with the SRFB process administered by IAC and with all state and federal agencies involved in the Boldt Phase 2 culvert case.

#### **Outcome-Focused Performance Measures**

The ideal performance measure for habitat related construction projects is the number of adult equivalent salmonids produced on an annual basis as a result of a project. This, or a surrogate, is an acknowledged way to prospectively evaluate projects. The Priority Index methodology referenced above captures this concept.

However, measurement of the salmon produced is extremely difficult and the specific cause and effect relationship of the project is nearly impossible to document. The next best performance measure available is miles opened by a passage project - a statistic that is a good surrogate for salmonids produced and also one that can be used to plan projects. It can also be measured after the project. Derivation of this statistic requires interaction of Salmon and Steelhead Habitat Inventory and Assessment Program (SSHIAP), with its

map measurement capabilities. The number of diversions screened is the most readily accessible performance measure for this project type. For the inventory effort, the performance measure is the number of watersheds or WDFW wildlife areas inventoried.

Because the Priority Inventory process was in place for a decade prior to passage of HB 1785, the department did not modify its prioritization and selection process because the existing approach largely captures the goals of the bill.

# **Recommendations for a Monitoring Program**

The Department of Fish and Wildlife currently maintains a fish passage barrier database. Fish passage projects are currently monitored for the first year after construction for compliance with the Hydraulic Permit Approval (HPA) and fish passage and screening criteria. All projects that are physically inspected and meets HPA requirements are entered as "fixed" fish passage barrier database. If the project is not physically inspected, then the issuance of an HPA constitutes a surrogate for a "fixed" determination, in which case the HPA database maintained by WDFW is needed for reference. The fish passage barrier database is also a data layer in the department's Salmon and Steelhead Inventory and Assessment Project (SSHIAP) that contains data on fish abundance and habitat conditions.

Implementation (short term compliance) monitoring is a confirmation that a project is built to legal (passage and screening) standards. Ideally, this would involve inspection and as-built confirmation by the permitting agency (i.e. the HPA issued by WDFW). However, because of insufficient funds to allow inspection of every completed project, the best surrogate is the issuance of the HPA, with the assumption that the provisions will be followed to the best of the permit recipient's ability. This also affords a cross-reference to databases that record uncorrected passage and screening problems. The issuance of the HPA (and ideally follow-up inspection) would then provide the trigger to change the status of the problem to "corrected" in those databases. In addition, the HPA is the common denominator for all passage and screening projects because it is universally needed for in-water work, so it will always provide a linkage regardless of who is doing the work or who is funding/tracking the project (e.g. SRFB).

Post-project efforts (funded with operating funds) include effectiveness monitoring, fish supplementation in special circumstances, long-term project tune-up, and documentation. Effectiveness monitoring (i.e., fish usage) is conducted on a subset of projects and is funded through the operating budget. Monitoring is divided into three levels, two of which involve verification of the physical parameters of the project that corrects fish passage and screening problems, and one that involves verification of fish usage after the project. This last step is the biological test of the project's effectiveness and typically involves spawning ground surveys above a fish passage project to verify fish usage. For projects conducted by WDFW, this step is a normal operating procedure. For other project proponents, this step is not always completed. It should be noted, however, that anticipated budget shortfalls in WDFW would curtail or preclude the biological monitoring.

The department does not anticipate making any changes at this time to its monitoring program as it relates to fish screens to meet the intent of HB 1785.

Long-term effectiveness and validity monitoring are being addressed and defined by the Technical Steering Committee in the Boldt Phase 2 culvert case, which will require coordination with SB 5637 Salmon Recovery Monitoring. A description of this process is contained in the Fish Screen component of this report.

# **Barriers to Fully Implementing HB 1785**

The main barrier to recording performance measures is establishing the linkages between barrier/unscreened diversion databases and corrections expressed through the HPA database and SSHIAP. The Technical Steering Committee in the Boldt Phase 2 culvert case is discussing this.

# **Wild Stock Restoration and Maintenance Program**

The goal of this program is to restore salmonid habitat, protect fish at water diversion facilities, and improve fish access to productive habitat. These are accomplished through bioengineering and construction of in-stream structures, natural rearing ponds, and off-channel spawning/rearing areas; fabrication and installation of screens and bypasses at surface water diversions; and construction of fish passage structures at impassable road culverts and dams. This \$34.25 million, ten-year phased project is a long-term, on-going process that utilizes many partnerships with federal, state, county, municipal, tribal and private entities in cost-sharing arrangements to accelerate wild stock restoration and maintenance.

#### **General Statutory Provisions**

Fish screening is mandated by RCW 77.55.040. Fish passage is mandated by RCW 77.55.060. Upgrading of previously constructed fish passage and screening facilities is addressed by RCW 77.55.070.

## **Identification of Eligible Projects**

The projects selected are first inventoried and prioritized by WDFW crews using the Priority Index (PI) methodology contained in WDFW Habitat Program's *Fish Passage Barrier and Surface Water Diversion Screening Assessment and Prioritization Manual* or other substitute methodology. The PI is a numeric indicator that reflects a project's relative priority based upon the potential production benefits to both anadromous and resident salmonids, with adjustments for closely related species interactions, expected passage improvement, stock health, and project cost.

Once a project is inventoried and prioritized, project options are developed. These options are evaluated based upon their ability to benefit particular species, their cost and feasibility, permitting requirements, compatibility with natural channel or estuary forming processes, and the potential to develop partnerships with tribes, local governments or federal agencies.

The selected projects are generally owned by cities, counties, or federal and private parties. They are meant to complement work on state owned lands and facilities in the same watersheds.

#### **Funds Appropriation History**

Appropriations for the past two and current biennia are shown in the table below.

Wildstock Restoration and Maintenance Appropriation History

Biennium	State Bonds	Federal	Local
1997-99	\$5,328,000	\$800,000	\$1,000,000
1999-01	\$1,700,000	\$0	\$550,000
2001-03	\$2,350,000	\$550,000	\$1,250,000

# **Program Implementation of HB 1785**

# **Consultation with Interest Groups**

Proposed project lists are shared with the department's Watershed Stewardship Teams, who provide liaison between WDFW and local stakeholders. The project lists are meant to facilitate a watershed approach to habitat construction projects.

# **Consultation with Other Natural Resource Agencies**

The Priority Index methodology referenced above is being utilized in concert with the SRFB process administered by IAC and with all state and federal agencies involved in the Boldt Phase 2 culvert case.

#### **Outcome-Focused Performance Measures**

The ideal performance measure for habitat related construction projects is the number of adult equivalent salmonids produced on an annual basis as a result of a project. This or some surrogate is an acknowledged way to prospectively evaluate projects. The Priority Index methodology referenced above captures this concept.

However, measurement of the salmonids produced is extremely difficult and the specific cause and effect relationship of the project is nearly impossible to document. The next best performance measure available is miles opened by a passage project - a statistic that is a good surrogate for salmonids produced and also one that can be used to plan projects. It can also be measured after the project. Derivation of this statistic requires interaction of Salmon and Steelhead Habitat Inventory and Assessment Program (SSHIAP), with its map measurement capabilities. The number of diversions screened is the most readily accessible performance measure for this project type. For the inventory effort, the performance measure is the number of watersheds inventoried. Similarly, the number of diversions screened and number of habitat restoration projects are the most readily accessible performance measure for these project types.

Because the Priority Inventory process was in place for a decade prior to passage of HB 1785 the Department did not modify its prioritization and selection process because the existing approach largely captures the goals of the bill.

#### **Recommendations for a Monitoring Program**

The Department of Fish and Wildlife currently maintains a fish passage barrier database. Fish passage projects are currently monitored for the first year after construction for compliance with the Hydraulic Permit Approval (HPA) and fish passage and screening criteria. All projects that are physically inspected and meet HPA requirements are entered as "fixed" into the fish passage barrier database. If the project is not physically inspected, then the issuance of an HPA constitutes a surrogate for a "fixed" determination, in which case the HPA database maintained by WDFW is needed for reference. The fish passage barrier database is also a data layer in the department's Salmon and Steelhead Inventory and Assessment Project (SSHIAP) that contains data on fish abundance and habitat conditions.

Implementation (short term compliance) monitoring is a confirmation that a project is built to legal (passage and screening) standards. Ideally, this would involve inspection and as-built confirmation by the permitting agency (i.e. the HPA issued by WDFW). However, because of insufficient funds to allow inspection of every completed project, the best surrogate is the issuance of the HPA, with the assumption that the provisions will be followed to the best of the permit recipient's ability. This also affords a cross-reference to databases that record uncorrected passage and screening problems. The issuance of the HPA (and ideally follow-up inspection) would then provide the trigger to change the status of the problem to "corrected" in those databases. In addition, the HPA is the common denominator for all passage and screening projects because it is universally needed for in-water work, so it will always provide a linkage regardless of who is doing the work or who is funding/tracking the project (e.g. SRFB).

Post-project efforts (funded with operating funds) include effectiveness monitoring, fish supplementation in special circumstances, long-term project tune-up, and documentation. These data are extended on a smaller subset of projects to determine proportions of fish production resulting from the projects but not absolute increments of fish (validity monitoring).

Effectiveness monitoring (i.e., fish usage) is conducted on a subset of projects and is funded through the operating budget. Monitoring is stratified into three levels, two of which involve verification of the physical parameters of the project that corrects fish passage and screening problems, and one that involves verification of fish usage after the project. This last step is the biological test of the project's effectiveness and typically involves spawning ground surveys above a fish passage project to verify fish usage. For projects conducted by WDFW, this step is a normal operating procedure. For other project proponents, this does not occur consistently. It should be noted, however, that anticipated budget shortfalls in WDFW would curtail or preclude the biological monitoring.

Longer-term effectiveness and validity monitoring are being addressed and defined by the Technical Steering Committee in the Boldt Phase 2 culvert case, which will require coordination with SB 5637 Salmon Recovery Monitoring.

The department does not anticipate making any changes at this time to its monitoring program as it relates to fish screens to meet the intent of HB 1785.

# **Barriers to Fully implementing HB 1785**

The main barrier to recording performance measures is establishing the linkages between barrier/unscreened diversion databases and corrections expressed through the HPA database and SSHIAP. The Technical Steering Committee in the Boldt Phase 2 culvert case is discussing this.

The challenge of reduced funding passed by the 2002 Legislature will reduce the number of projects and eliminate validity and some effectiveness monitoring for projects conducted by WDFW.

# **Hatchery Reform Program**

WDFW operates over ninety hatchery facilities statewide. Some of these facilities were built more than a century ago when there was no Endangered Species Act or Clean Water Act. Due to inadequate funding for long-term maintenance, many of these facilities fail to meet current WDFW or NMFS water intake screening or in-stream flow requirements. Others provide little or no adult fish passage above the hatchery intakes, while others do not have the pollution abatement ponds necessary to meet existing state and federal water quality discharge requirements under the Clean Water Act. State hatcheries must comply with federal ESA requirements or risk violating federal law.

WDFW's Strategic Plan Goal includes objectives to ensure hatchery operations continue to produce fish for fishing opportunities, comply with requirements of the Endangered Species Act and other environmental regulations, and are used for the protection and preservation of listed fish stocks. The Hatchery Reform Program will identify and begin to address the much-needed infrastructure improvements at many hatcheries. This is a collaborative effort with the tribes, federal scientists and private non-profit organizations.

### **General Statutory Provisions**

Screening water diversions to protect fish is mandated by RCW 77.55.040. Maintenance of fish passage is mandated by RCW 77.55.060. Upgrading of previously constructed fish passage and screening facilities is addressed by RCW 77.55.070. The federal Endangered Species Act is found in 16 USC, Chapter 35. Federal Regulations regarding hatchery management issues related to the ESA is found in the Federal Register at 50 CFR Part 223.

# **Eligible Projects**

The Department of Fish and Wildlife has focused on four major activities to reform hatcheries to meet ESA requirements.

## Pollution Abatement Ponds/Venturi Cleaning Systems/Constructed Wetlands
Work includes the retrofit of 25 WDFW hatchery facilities that either have no
pollution abatement pond or need their current systems renovated. These
renovations need to be carried out as soon as possible in order to comply with
EPA requirements, Department of Ecology National Pollution Discharge
Elimination System (NPDES) discharge requirements and the Clean Water Act.

#### # Adult Fish Handling

This includes retrofit of adult anadromous salmonid handling areas to enable hatchery crews to return naturally produced adult fish back to the stream with as little harm or stress to the fish as possible. Most adult handling areas are not very

"fish friendly" and returning naturally produced fish back to the river is very hard on the fish. Twenty-three projects have been identified.

# # Fish Passage and Screen Compliance

WDFW has identified thirty-three fish passage barriers at hatchery intakes. The most recent survey was completed in 1995 and a new survey using current standards should be completed soon. Work includes retrofit or renovation of hatchery intakes to allow adult fish passage. This work opens miles of stream habitat for natural fish production. WDFW also has a minimum of eleven facilities that fail to meet the department's screen mesh requirements and another ten fail to meet screen sweep velocity requirements. These intake-screening problems need to be remedied as soon as possible to keep naturally produced juvenile fish from being impinged on intake screens or from entering hatchery water supplies.

#### # In-Stream Flow Restoration

WDFW has approximately 20 facilities that de-water stream reaches while diverting water through the hatchery facilities. This work includes retrofit of hatchery intakes or installation of water delivery systems to return water back to the point of diversion to preclude dewatered stretches of the river.

WDFW has conducted on-site surveys to determine which hatcheries have one or more of the above problems and what will be necessary to correct them in the most cost effective and timely manner.

In addition to these surveys, prioritization and project selection is also based in part upon the recommendations of the Hatchery Scientific Review Group (HSRG). The HSRG is an independent scientific panel established by Congress to ensure that hatchery reform programs in Puget Sound and Coastal Washington are developed and evaluated scientifically. The panel is composed of five independent scientists (selected from a pool of candidates nominated by the American Fisheries Society) and four agency scientists designated by WDFW, the Northwest Indian Fisheries Commission (NWIFC), the National Marine Fisheries Service and the United States Fish and Wildlife Service with a broad range of experience and expertise ranging from biology, genetics, ecology, fisheries, fish culture, fish pathology, biometrics and other disciplines.

In addition to providing recommendations on ways to operate hatcheries to minimize threatened and endangered fish, the HSRG has also established the goal of determine how hatcheries will be used to recover and conserve naturally spawning fish populations while also supporting sustainable fisheries.

In February 2002 the HSRG completed a set of recommendations for a portion of the hatcheries in the Puget Sound region. This includes facilities in the Eastern Strait of Juan de Fuca, South Sound (south of the Tacoma Narrows Bridge), and on the Snohomish/Stillaguamish rivers. The HSRG anticipates completing their review of hatchery programs for the remainder of Puget Sound and the Coast in late 2003 or early

2004. WDFW selected and prioritized projects from these recommendations and submitted proposals to the Governor and Legislature for funding. Prioritization was generally based on the need to meet compliance with federal and state laws.

#### **Funds Appropriation History**

For the 2001-2003 state biennium, \$20 million (\$10 million state bonds and \$10 million federal fund authority) was requested for hatchery reform efforts. The Legislature provided \$905,000 in state bonds for hatchery reform projects and authority for \$10 million in federal funds. For the current federal fiscal year, \$1 million of the \$10 million for authority has been provided for hatchery reform capital needs. There are no commitments for additional federal funds for hatchery reform next year.

The Scientific Review Group (HSRG) contributed approximately \$ 1.0 million in federal funds in 2002 for capital improvements to WDFW hatchery facilities. However, there is no guarantee that this contribution will continue.

Appropriations for the past two and current biennia are shown in the table below.

# **Historical Hatchery Reform Appropriations**

Biennium	State Bonds	Federal
1997-99	\$3,025,000	\$0
1999-01	\$4,000,000	\$0
2001-03	\$905,000	\$1,000,000

Additional information on hatchery reform can be found at:

http://www.lltk.org/hatcheryreform.html

http://www.wa.gov/wdfw/recovery/hatcherychange.htm

http://www.wa.gov/wdfw/science/hatchery\_reform/lltk.html

#### Program Implementation of HB 1785

#### **Consultation with Other Natural Resource Agencies**

Hatchery reform involves numerous federal, state and tribal interests. The Hatchery Scientific Review Group (HSRG) has solicited input from numerous tribes, state and federal agencies as well as stakeholder groups.

#### **Outcome-Focused Performance Measures**

The table below summarizes the performance measure for each habitat parameter (output expression) that a Hatchery Reform project is designed to address. Under the best

circumstances, the ideal measure is what would be used, but pragmatically a first or second surrogate is used to measure the project success.

The ideal performance measure to plan and monitor a passage project would be the number of juveniles equivalent and adult equivalent salmonids produced annually by the habitat made accessible by the project. Unfortunately, measurement of salmonids is extremely difficult, and even if achieved proving that the projects improved salmon produced is nearly impossible to document. In other words, did the change in salmonid production (juvenile or adult) result from the passage project or changes in: land use practices, weather, harvest patterns, etc? Therefore, the next best performance measure used is miles of stream habitat opened by the project - a statistic that is a good surrogate for salmonids produced and also one that can be used for planning projects and monitoring.

It is assumed that compliance monitoring addresses all capital projects and includes asbuilt, durability, and efficiency assessments (short- and long-term). Effectiveness monitoring addresses the result of the project (e.g.: do adult fish now migrate past a corrected blockage?). Validity monitoring addresses the base assumptions concerning a project's effect on habitat limiting factors (e.g.: smolt trapping to quantify changes in production upstream). Validity monitoring may be relatively easy to perform in some cases, but the assignment of specific causes and effects is extremely difficult. This may direct validity monitoring to non-prescriptive "watershed health" indexing. Because of this difficulty, validity monitoring is not addressed here.

# Hatchery Reform: Performance measures and monitoring

Output Expression	Performance Measure ("naturally produced" salmonids)	Measurability	Monitoring
Water - ideal	Annual salmonids produced	difficult and confounded	none prescribed
Water - first surrogate	Quality/Quantity	somewhat measurable	water chemistry flow assessments
Water - second surrogate	Number of projects completed	measurable	number of compliant projects
Passage - ideal	Annual salmonids produced	difficult and confounded	none prescribed
Passage - first surrogate	Miles opened	measurable	mapped distances or mean values
Passage - second surrogate	Number of projects completed	measurable	number of compliant projects
Screening - ideal	Annual salmonids protected	difficult and confounded	none prescribed
Screening - first surrogate	Discharge screened	somewhat measurable	water right or measured flow discharge
Screening - second surrogate	number of projects completed	measurable	number of compliant projects

Shading = selected choice

For the reasons stated above, WDFW has decided to rely upon surrogate measures for showing success of the hatchery reform effort. Performance measures include the numbers of compliant projects (water), number of compliant projects (water diversion screening), and miles of stream made accessible (fish passage). WDFW also regularly monitors the water discharge from all hatcheries to comply with federal Clean Water Act water quality standards.

# **Potential Barriers to Implementation**

Adequate funding remains the largest impediment to implementing the necessary projects.

A reconnaissance estimate of the costs for the backlog projects is shown in the table below. Without adequate funding progress in hatchery reform will be slow.

# **Initial Costs Estimates for Hatchery Reform**

Project Type	Estimated Cost
Pollution Abatement Ponds, Venturi Cleaning Systems, and	\$ 20 -22 million
Constructed Wetlands	
Hatchery Retrofitting for ESA (adult handling areas)	\$ 25 - 30 million
Fish Passage and Screen Compliance	\$ 20 – 25 million
In-Stream Flow Restoration	\$ 18 – 22 million

The department needs to complete an inventory of upstream and downstream fish passage facilities using current criteria. The last inventory was published in 1995 and used criteria that are now out of date.

# **Regional Fisheries Enhancement Program**

The Washington State Legislature created the Regional Fisheries Enhancement Program in 1990 to (RCW 77.95.070):

- ∉# Enhance the salmon resources of the state;
- # Maximize volunteer efforts and private donations to improve the salmon and steelhead resources for all citizens;
- # Assist the department in achieving the goal to double the state-wide salmon and steelhead catch by the year 2000; and
- # Develop projects designed to supplement the fishery enhancement capability of the department.

Currently, fourteen non-profit groups work with the WDFW and local volunteers to improve salmon resources in geographic regions throughout the state. Each group is a non-profit "501 (c) (3)" corporation with a board of directors, subcommittees, and in most cases, paid staff positions to help with administrative operations (all 14 pay at least part-time staff).

# CHANGAN SKAGIT 2 FERRY STEVENS SECRETARISH SECRETARISH CHIRCLE STEVENS CHANGAN DOUGLAS LINCOLN SPOKAN ADAMS FRANKL GRANT ADAMS FRANKL GRANT ADAMS FRANKL COLUMBIA OCCUMBIA COLUMBIA COLUMBIA COLUMBIA COLUMBIA ASSTIN

Regional Fisheries Enhancement Group Boundaries

As directed by statute, the department has established an advisory board to provide input on management of the program. The RFEG Advisory Board has seven members appointed to three-year terms by the WDFW Director. The board consists of three at-

large positions, two positions representing recreational fishing interests, and three representing commercial salmon fishing interests. The Northwest Indian Fisheries Commission and the Columbia River Inter Tribal Fisheries Commission may each nominate one board member as well.

The board meets quarterly to review and discuss relevant policy, budgetary, or legislative issues. It also reviews applications for project funding from the 14 RFEGs and makes recommendations to WDFW about approval, denial, or modification of the applications.

The board, along with RFEG representatives, maintains four committees: Administration, Finance/Budget, Project Review, and RFEG Representative. WDFW Program staff act as staff to the Advisory Board. Advisory Board members receive no pay, but are allowed per diem for travel costs associated with Board duties.

### **General Statutory Provisions**

RFEGs are incorporated pursuant to Title 24 RCW. RCW 77.95.030 – 77.95.130 provides statutory guidance for the program. WAC 220-140 provides administrative guidelines.

#### **Eligible Grant Recipients and Activity**

The fourteen RFEGs are the only groups eligible to receive funding through the Regional Fisheries Enhancement Program. In statute, enhancement is defined as "including, but not limited to, hatcheries, spawning channels, rearing ponds, egg boxes, fishways, fish screens, stream bed clearing, erosion control, habitat restoration, net pens, applied research projects, and any equipment, real property, or other interest necessary to the proper operation thereof."

The RFEG Advisory Board at quarterly advisory board meetings reviews project proposals. Before submitting proposals to the advisory board, project proposals must be approved by the RFEG's own Board of Directors and the department's local Watershed Steward. The Watershed Steward also seeks input from relevant tribes and incorporates those comments into the review.

Advisory board project review is based on the following questions addressed in the project proposal: 1) Does the project proposal identify the species, stock, ESU, etc that well be targeted by the project; 2) Does the proposal identify need; 3) Does the proposal define success and have a specific monitoring plan; 4) Will dollars allocated by the RFEG toward this project benefit anadromous fish immediately and/or will results combine with other projects to effectively provide long-term benefits to anadromous fish; 5) Is the proposed budget outlined and reasonable relative to deliverables; and, 6) Does this proposal include volunteer/community support for salmon restoration.

Examples of projects funded include fish production, development of riparian buffer zones, culvert replacement, barrier removal, bank stabilization, community awareness and education, nutrient enhancement and cattle exclusion fencing.

#### **Funds Appropriation History**

As described in RCW 77.95.090, the RFEG program was initially funded by a "portion of each recreational license fee" and a "surcharge of one hundred dollars...on each commercial salmon fishery license, each salmon delivery license, and each salmon charter license sold in the state." The portion of recreational license fees allocated to the RFEG program ranges from 2.13 percent for a freshwater license to 5.67 percent for a salt-water license.

Funding in some subsequent years has also been provided through grants from the U.S. Fish and Wildlife Service, but no federal funds were appropriated for federal FY-02. To fill this one-year gap, the RFEG program obtained \$700,000 from the Salmon Recovery Funding Board (SRFB), and continues to solicit funds from other grant sources.

Appropriations for the past two and current biennia are shown in the table below.

# RFEG Funding (operating and capital)

Biennium	State	Federal	Capital Funds SRFB
1997-99	\$ 1,364,000	\$ 472,000	_
1999-01	\$ 1,150,000	\$1,486,000	
2001-03	\$1,236,000 <sup>1</sup>	\$1,750,000	\$700,000

<sup>1.</sup> Estimated Expenditures.

# **Program Implementation of HB 1785**

#### **Consultation with Interest Groups**

WDFW has not established a process specifically designed to discuss implementation of HB 1785, but several of the key concepts have been discussed and applied. For example, the agency has worked closely with the Chehalis Basin Fisheries Task Force and other local groups to develop an integrated package of tools, organizations, and funding leading to restoration of the salmonids in the Chehalis Basin. Our discussions have focused on the need to have a clear goal, and a structured process of analysis, planning, project implementation and monitoring. We have found this approach to be extremely helpful in working toward a common vision for restoration actions – and the approach appears to be supported by watershed groups as a means to work in a positive, productive manner with the department.

#### **Consultation with Other Natural Resource Agencies**

Two key components of WDFWs strategy for salmon recovery are 1) tools to quantitatively predict the benefits of management actions and 2) monitoring programs to assess the realized benefits of the actions. We are working closely with many organizations to refine and implement this strategy, including watershed groups, the Puget Sound Shared Strategy, the Lower Columbia Fish Recovery Board, the National Marine Fisheries Service, and technical groups associated with developing the statewide salmon monitoring strategy. We believe protocols and procedures developed with these organizations will be extremely helpful as we work to improve the performance measures to be used both for management and performance assessment of the RFEG program.

#### **Outcome-Focused Performance Measures**

Current reports require the RFEGs to record such information as species of salmon affected, miles of stream opened to fish passage/spawning, feet of fencing, etc. No additional performance measures have been developed related to HB 1785. Currently performance measures are not used in Program management. These outcomes are used in assessments of the Regional Fisheries Enhancement Program.

#### Modifying Grant/Loan Applications to Incorporate Environmental Benefits

Applications have not been modified recently. Environmental information contained within close-out reports is not used in the prioritization and selection process.

# **Recommendations for a Monitoring Program**

WDFW supports outcome focused performance measures, but recognizes that the RFEG program does not currently have the funding or infrastructure to fully implement the 16 key investment practices identified by JLARC. In the 1999-01 budget cycle, WDFW proposed a package to develop many of the tools required to implement a decision making process that would ensure the effectiveness of our investments. This package was not funded. Development of a monitoring system will await the outcome of the recommendation for the monitoring oversight committee due at the end of 2002.

#### **Barriers to Fully Implementing HB 1785**

WDFW continues to support the development of the elements discussed above in the RFEG program and, more broadly, in salmon recovery planning. Two significant impediments exist:

A lack of funding forced WDFW to rely on piecing together a variety of funding sources for monitoring activity. The patchwork of funding has not been conducive to developing

#### **Department of Fish and Wildlife**

a statewide framework for evaluating and prioritizing restoration actions across broad geographic regions.

Second, as noted in the JLARC report, developing a coordinated and consistent monitoring approach remains a challenge for state agencies, the tribes, local governments, and other organizations.